

ing surface features at a particular level of detail, said first set of printed maps substantially coinciding in geographic area with grid quadrangles of a first set of printed map grid quadrangles of substantially equal area and substantially constant scale, said first set of printed map grid quadrangles having boundary lines substantially parallel with coordinate lines of a selected geographical coordinate system and forming a first-level printed map grid, said first set of printed map grid quadrangles being identified by first printed map grid quadrangle names;

said first set of printed maps being subdivided into a second set of printed map grid quadrangles of substantially equal area and constant scale by a second level grid, wherein each grid quadrangle of said second set of printed map grid quadrangles covers a smaller geographical area than said grid quadrangles of said first set of printed map grid quadrangles, said second set of printed map grid quadrangles being defined by boundary lines substantially parallel with coordinate lines of said selected geographical coordinate system and being identified by second printed map grid quadrangle names;

first computer means having a display, said first computer means being programmed to display on said display selected display grid quadrangles corresponding to said first set of printed map grid quadrangles and to said second set of printed map grid quadrangles identified by display grid quadrangle names;

at least one database of selected geographical-coordinate-locatable objects (loc/objects) storable on a memory device and readable by said computer means, said selected loc/objects identified by geographical coordinate location, said first computer means being programmed to display on said display locations of one or more of said selected loc/objects in said display grid quadrangles corresponding to map locations of said selected loc/objects in said first set of printed map grid quadrangles and said second set of printed map grid quadrangles;

a second computer means at a location remote from said first computer means, said second computer means being programmed in a manner similar to said first computer means;

and a data communications link between said first computer means and said second computer means.

7. A computer aided map location system (CAMLS) comprising:

a first set of substantially constant-scale printed maps at a first scale depicting surface features over a specified geographical area, over a specified geographical area, said first set of substantially constant-scale printed maps substantially coinciding with substantially equal-area first printed map grid quadrangles of a first scale grid, said first printed map grid quadrangles being identified by a first set of printed map grid quadrangle names;

a first computer means having a display, a first database, and a display subsystem performing functions of a database manager, said first database comprising said first set of printed map grid quadrangle names;

said first scale grid comprising grid lines defining boundary lines of said first set of grid quadrangles, said boundary lines of said first scale grid being substantially parallel to lines of latitude and longitude across said specified geographic area and being identified in said first database by latitude and longitude location;

said display subsystem being constructed to cause the drawing and display of selected printed map grid quadrangles of said first scale grid as a first set of display grid quadrangles identified by a first set of display grid quadrangle names, said display grid quadrangles being correlated with printed maps from said first set of printed maps substantially coinciding in geographic area with said selected printed map grid quadrangles;

said first computer means comprising a user location system for generating signals corresponding to the latitude and longitude of a location of a CAMLS user, and wherein said display subsystem is constructed for displaying on said first computer means display said location of said CAMLS user on selected display grid quadrangles displayed on said display for correlation of locations with said printed maps of said first set of printed maps coinciding in geographic area with said selected printed map grid quadrangles;

said first set of printed maps comprising a second scale grid formed on said first set of printed maps subdividing each of said printed map grid quadrangles of said first scale grid into a plurality of substantially equal area second scale second printed map grid quadrangles identified by a second set of printed map grid quadrangle names, said second scale grid comprising grid lines defining boundary lines of said second set of printed map grid quadrangles, said boundary lines of said second scale printed map grid quadrangles being substantially parallel to lines of latitude and longitude across said specified geographic area; and

said first database comprising said second set of printed map grid quadrangle names, said boundaries of said second printed map grid quadrangles being identified by latitude and longitude in said first database, said display subsystem being constructed for drawing and displaying on said display of said first computer means boundary lines of selected grid quadrangles of said second scale grid identified by unique name and for displaying the location of a CAMLS user on the second printed map grid quadrangles for correlation of locations with printed maps of said first set of printed maps with greater localization;

a second set of substantially constant scale maps at said second scale depicting surface features in greater detail than in said first set of printed maps over said specified geographical area, said second set of printed maps substantially coinciding in geographic area with grid quadrangles of said second scale grid for correlating said location and a route of said CAMLS user displayed on a second display grid quadrangle with locations on a coinciding printed map of said second set of printed maps; and

a second database storable on a memory device and readable by said first computer means comprising latitude and longitude locatable objects (loc/objects) identified by latitude and longitude location in said specified geographical area, said display subsystem causing selected loc/objects to be displayed in displayed grid quadrangles of said first scale grid or said second scale grid for correlation with locations on said printed map of said first set of printed maps or said second set of printed maps coinciding in geographic area with said specified printed map grid quadrangles;

a second computer means;

and a data communications link between said first computer means and said second computer means.